

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) An electronic thermostat for use with a liquid heating apparatus heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature, ~~and;~~

a solid-state switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature-; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

2. (currently amended) A method of heating a ~~liquid~~ a beverage dispenser, the method comprising:

operating a mechanical switch to apply power to a heater to heat the liquid from an initial temperature toward a target temperature, ~~and;~~

operating a solid-state switch to apply power to the heater to maintain the liquid substantially at the target temperature-; and

the mechanical switch and the solid-state switch being controlled by, and coupled to a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

3. (currently amended) In a beverage brewing apparatus, an electronic thermostat for use with a liquid heating apparatus heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature, ~~and;~~

a solid-state switch through which electrical power is applied to the heater to maintain the

temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating a liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

4. (currently amended) A method of heating a liquid for use in with a ~~beverage brewing apparatus~~ heated beverage dispenser, the method comprising:

operating a mechanical switch to apply power to a heater to heat the liquid from an initial temperature toward a target temperature; ~~and;~~

operating a solid-state switch to apply power to the heater to maintain the liquid substantially at the target temperature; and

the mechanical switch and the solid-state switch being controlled by, and coupled to a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

5. (currently amended) An electronic thermostat kit for use ~~in combination~~ with a ~~liquid heating apparatus~~ heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat kit comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature; ~~and;~~

a solid-state switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

6. (currently amended) An electronic thermostat for use with a ~~liquid temperature modifying apparatus~~ heated beverage dispenser having a container in which liquid is contained and a temperature modifier that is operable by electrical power to at least one of heat or cool the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the temperature

modifier to change a temperature of the liquid from an initial temperature toward a target temperature, ~~and;~~

a solid-switch through which electrical power is applied to the temperature modifier to maintain the temperature of the liquid at substantially the target temperature; ~~and~~

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

7. (original) A method of modifying the temperature of a liquid, the method comprising:

operating a mechanical switch to apply power to a temperature modifier to change the temperature of a liquid from an initial temperature toward a target temperature, and

operating a solid-state switch to apply power to the temperature modifier to maintain the liquid substantially at the target temperature.

8. (new) The method of claim 7, wherein the temperature modifier is a cooling element.